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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,424	02/17/2004	Clayton C. Bohn JR.	5853-401	2023

30448 7590 02/16/2006

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EXAMINER

BASINGER, SHERMAN D

ART UNIT PAPER NUMBER

3617

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,424

Applicant(s)

BOHN ET AL.

Examiner

Sherman D. Basinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ⁹ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 26 and 27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25, 28 and 29 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 7, 2006 has been entered.

Drawings

2. Replacement sheets 1/6-5/6 with figures 1(a)-9 are approved.
3. Replacement sheet 6/6 is not approved because of new figures 11(a) and 11(b) which have no basis in the specification as originally filed (note that the specification as originally filed does not have a brief description or detailed description of figures 11(a) and 11(b)). Further figures 11(a) and 11(b) are objectionable because of the lack of clarity in the figures. Figure 10 of sheet 6/6 is acceptable.
4. A replacement sheet 6/6 containing only figure 10 is required unless applicant points out basis for figures 11(a) and 11(b) in the specification as originally filed, provides a brief description in the specification for figures 11(a) and 11(b) and corrects figures 11(a) and 11(b) such that each is clear.

Claim Objections

5. Claims 3 and 18 are objected to because of the following informalities: in claim 3, line 1 "said" after "wherein" should be deleted as it is redundant; and in claim 18 "said subsurface" has no clear antecedent. Appropriate correction is required.

Election/Restrictions

6. This application is in condition for allowance except for the presence of claims 26 and 27 directed to an invention non-elected without traverse. Accordingly, claims 26 and 27 should be cancelled.

Allowable Subject Matter

7. Claims 1-25, 28 and 29 are allowed.

Conclusion

8. This application is in condition for allowance except for the following formal matters:

See paragraphs 3-6 above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

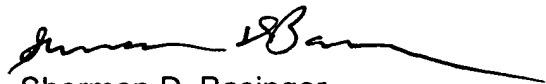
A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-

272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
Primary Examiner
Art Unit 3617

2/13/06

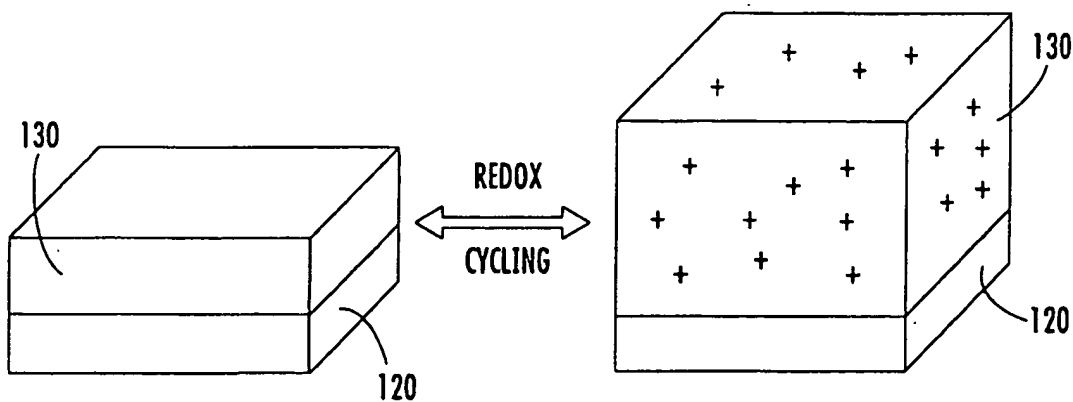


FIG. 1(a)

FIG. 1(b)

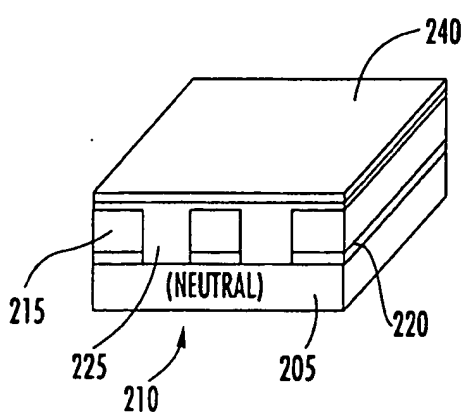


FIG. 2(a)

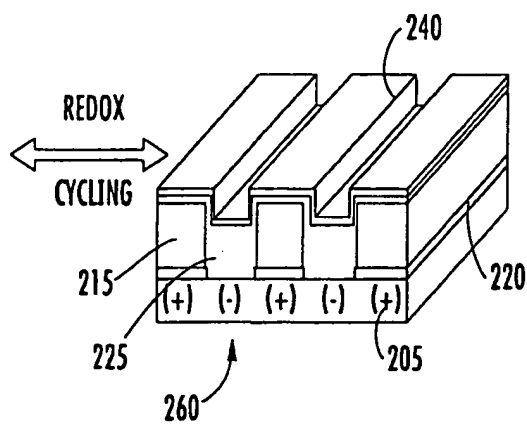


FIG. 2(b)

Sheets 1-5
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2-10-06

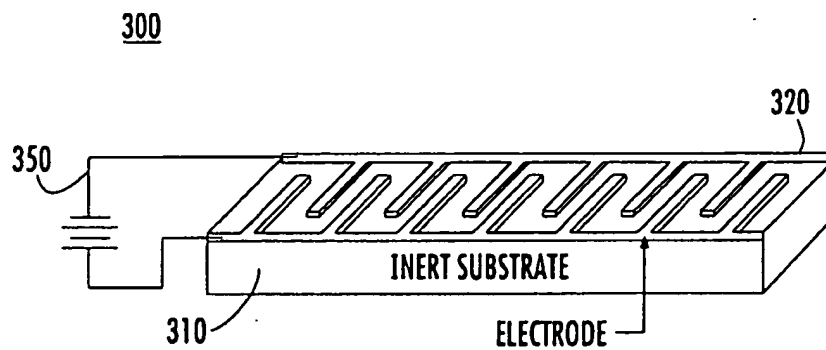


FIG. 3

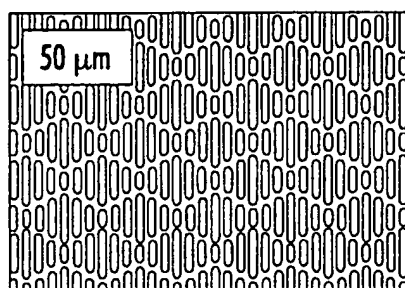


FIG. 4(a)

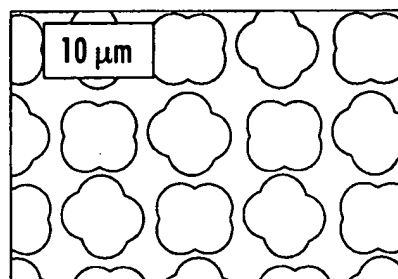


FIG. 4(b)

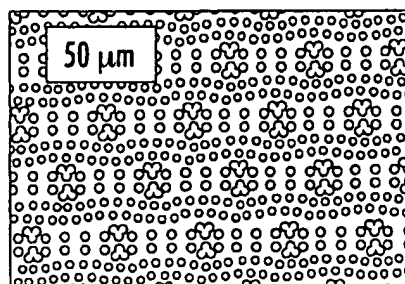


FIG. 4(c)

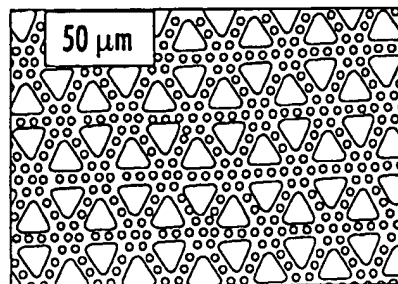


FIG. 4(d)

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	DEPTH (μm)	SPACING (μm)	WIDTH (μm)	ROUGHNESS FACTOR
RIBLET	5	2	2	5.0
	8	2	2	7.3
	10	2	2	8.9
STAR/CLOVER	5	2	4	4.5
	8	2	4	6.6
	10	2	4	8.0
	5	2	2,4	3.6
	8	2	2,4	5.2
	10	2	2,4	6.2
GRADIENT	5	1,2,3,4	2	2.8
	8	1,2,3,4	2	3.8
	10	1,2,3,4	2	4.5
TRIANGLE/CIRCLE	5	1	1,5	7.5
	5	2	2,10	4.2
	5	3	3,15	3.2
	8	1	1,5	11.3
	8	2	2,10	6.2
	8	3	3,15	4.4
	10	1	1,5	13.9
	10	2	2,10	7.5
	10	3	3,15	5.3

FIG. 5

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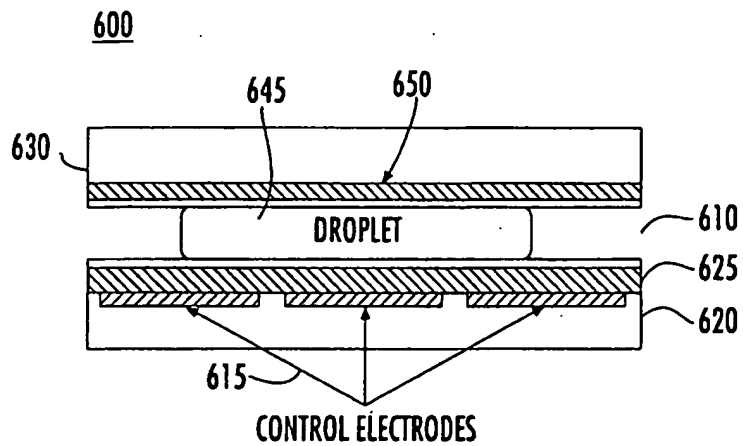
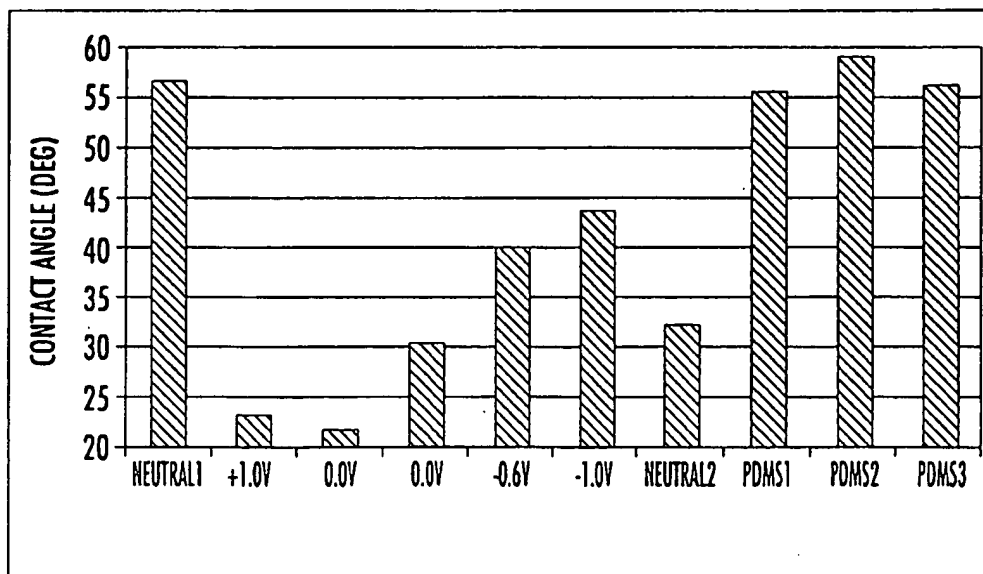


FIG. 6



5/6

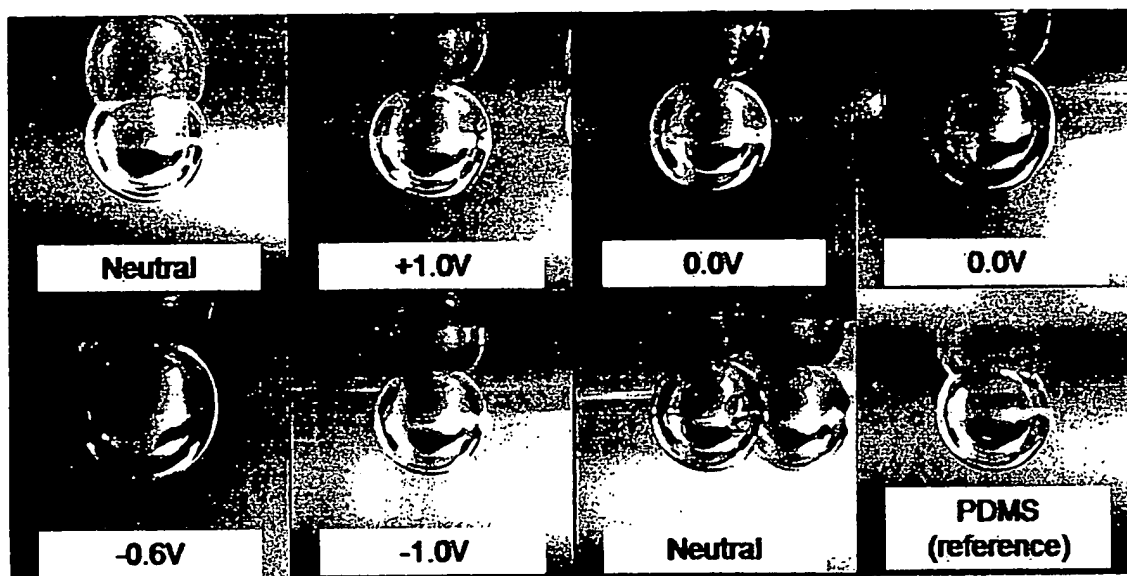


FIG. 8

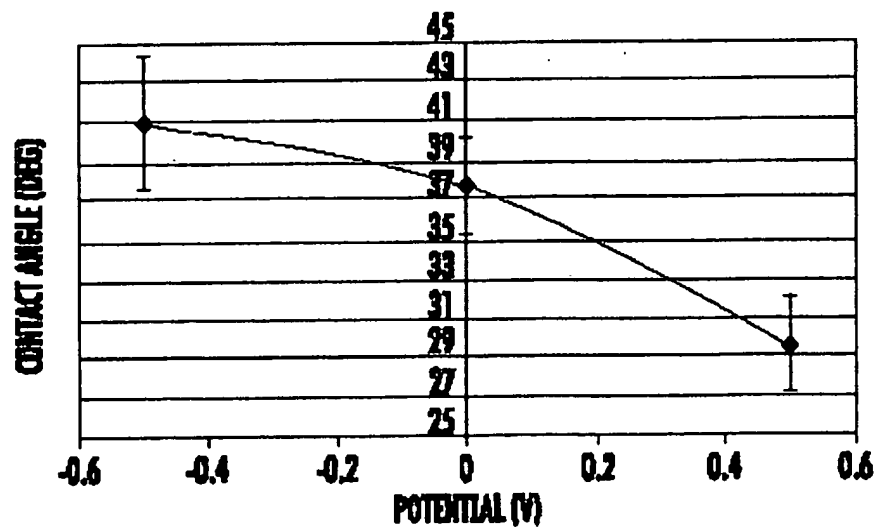


FIG. 9

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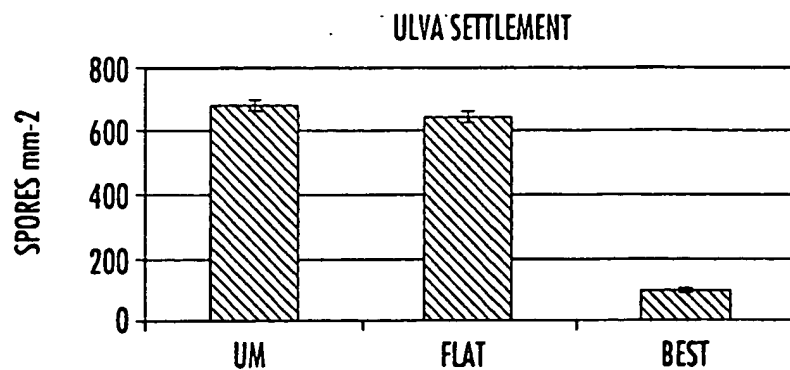


FIG. 10

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8-16-04

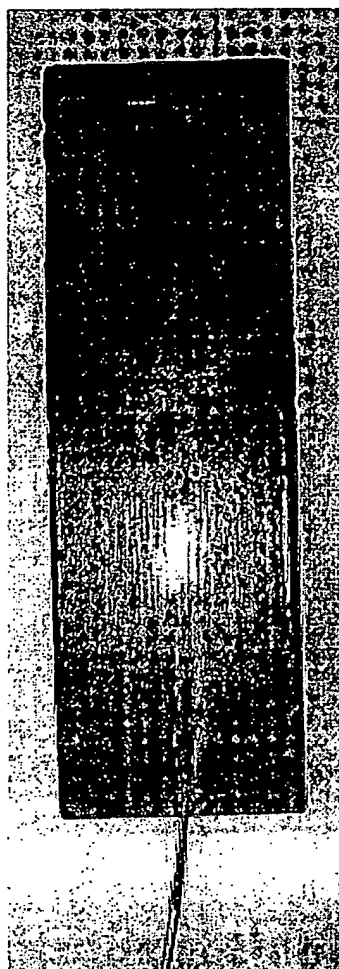


FIG. 11(a)

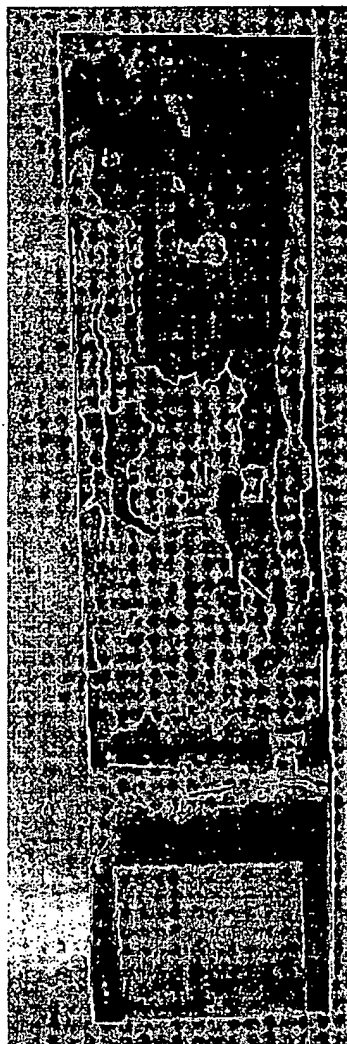


FIG. 11(b)